

PCTWORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

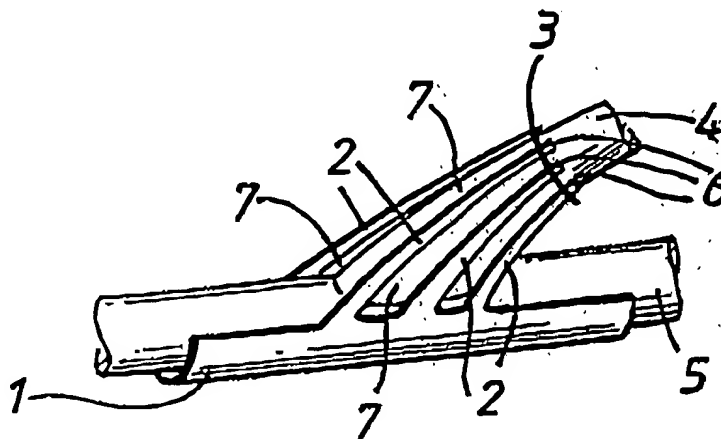
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : A61L 2/06	A1	(11) International Publication Number: WO 00/32241 (43) International Publication Date: 8 June 2000 (08.06.00)
<p>(21) International Application Number: PCT/GB99/03999</p> <p>(22) International Filing Date: 30 November 1999 (30.11.99)</p> <p>(30) Priority Data: 9826254.6 30 November 1998 (30.11.98) GB</p> <p>(71) Applicant (for all designated States except US): IMPERIAL COLLEGE OF SCIENCE, TECHNOLOGY & MEDICINE [GB/GB]; Exhibition Road, London SW7 2AZ (GB).</p> <p>(72) Inventors; and (75) Inventors/Applicants (for US only): CARO, Colin, Gerald [GB/GB]; Imperial College of Science, Technology & Medicine, Exhibition Road, London SW7 2A7 (GB). DOORLY, Denis, Joseph [IE/GB]; Imperial College of Science, Technology & Medicine, Exhibition Road, London SW7 2A7 (GB). McLEAN, Mary, Anne [US/GB]; Imperial College of Science, Technology & Medicine, Exhibition Road, London SW7 2AZ (GB).</p> <p>(74) Agent: MARCH, Gary, Clifford; Batchellor, Kirk & Co., 102-108 Clerkenwell Road, London EC1M 5SA (GB).</p>	<p>(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW); Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM); European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE); OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p>Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p>	

(54) Title: **STENTS FOR BLOOD VESSELS**

(57) Abstract

A stent for supporting part of a blood vessel which stent includes a supporting portion around which or within which part of an intact blood vessel other than a graft can be placed so that the stent internally or externally supports that part and the supporting portion of the stent is of a shape and/or orientation whereby flow within the vessel is caused to follow a non-planar curve. By maintaining non-planar curvature in the vessel itself, favourable blood flow velocity patterns can be achieved through generation therein of "swirl" flow. Failures in such vessels through diseases such as thrombosis, atherosclerosis, intimal hyperplasia or through blockage, kinking or collapse, can be significantly reduced.



[illegible]